

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for input parameter binding, comprising:
 - at bind time, storing optimization information in a bind-in structure, wherein the bind-in structure has an associated section number;
 - when executing a statement, when performing bind-in of host variables, comparing data in an application structure received with the statement with optimization information in the bind-in structure, wherein the optimization information includes at least one of data type, length, Coded Character Set Identifier, an array size, an indication of whether conversions are required, and an indication of whether the required conversions are valid, wherein the statement has an associated section number, wherein the application structure describes data, wherein the application structure is used to store data to be retrieved for a fetch statement, and wherein the application structure is used to provide data to be inserted for an insert statement;
 - when there is a match between the data in the application structure and data in the optimization information in the bind-in structure, executing the statement with the optimization information to perform one of fetching data from the data store and inserting data into the data store, wherein the bind-in structure and the statement have a same section number; and
 - when there is not a match between the data in the application structure and the optimization information,
 - regenerating optimization information; and
 - executing the statement with the regenerated optimization information to perform one of fetching data from the data store and inserting data into the data store.
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)

5. (Original) The method of claim 1, further comprising:
for fixed length data,

storing an increment length by which a data pointer that is pointing to data in an application program area is to be incremented to find a location of a next data value; and

calculating the location of the next data value by adding the increment length to the data pointer.

6. (Original) The method of claim 1, further comprising:

for distributed processing, at a client computer, calculating a location of data in a client communications buffer.

7. (Original) The method of claim 1, further comprising:

for distributed processing, at a server computer, calculating a location of data in a server communications buffer.

8. (Original) The method of claim 1, further comprising:

for distributed processing, at a client computer, calculating a location of data in an application program address space.

9. (Original) The method of claim 1, further comprising:

when returning a handle to a cursor to a result set from a stored procedure to an application, recalculating the optimization information.

10. (Currently Amended) A method for output parameter binding, comprising:

at bind time, storing optimization information in a bind-out structure wherein the bind-out structure has an associated section number;

when executing a statement, when performing bind-out of host variables, comparing data in an application structure received with the statement with optimization information in the bind-out structure, wherein the optimization information includes at least one of data type, length, Coded Character Set Identifier, an array size, an indication of whether conversions are required,

and an indication of whether the required conversions are valid, wherein the statement has an associated section number, wherein the application structure describes data, wherein the application structure is used to store data to be retrieved for a fetch statement, and wherein the application structure is used to provide data to be inserted for an insert statement;

when there is a match between the data in the application structure and data in the optimization information in the bind-out structure, executing the statement with the optimization information to perform one of fetching data from the data store and inserting data into the data store, wherein the bind-out structure and the statement have a same section number; and

when there is not a match between the data in the application structure and the optimization information,

regenerating optimization information; and
executing the statement with the regenerated optimization information to perform one of fetching data from the data store and inserting data into the data store.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Original) The method of claim 10, further comprising:

for fixed length data,

storing an increment length by which a data pointer that is pointing to data in an application program area is to be incremented to find a location of a next data value; and

calculating the location of the next data value by adding the increment length to the data pointer.

15. (Original) The method of claim 10, further comprising:

for distributed processing, at a client computer, calculating a location of data in a client communications buffer.

16. (Original) The method of claim 10, further comprising:
for distributed processing, at a server computer, calculating a location of data in a server communications buffer.

17. (Original) The method of claim 10, further comprising:
for distributed processing, at a client computer, calculating a location of data in an application program address space.

18. (Original) The method of claim 10, further comprising:
when returning a handle to a cursor to a result set from a stored procedure to an application, recalculating the optimization information.

19-38. (Cancelled)